

Helicopter landing on the former NOAA Ship Surveyor in the Arctic Pack



Arctic region reference map with place names



The North Pole, April, 2000 Photograph by Sigrid Salo, NOAA/PMEL

1315 East West Hwy Silver Spring, MD 20910 301-713-1671 www.oar.noaa.gov

# **Arctic Research Office**

Integrating NOAA s research in a region critical to our nation and our planet

## What does the Arctic Research Office do for the nation?

The The Arctic Research Office (ARO) serves as a focal point for NOAA's research activities in the Arctic, activities in the Arctic, Bering Sea, activities in the Arctic, offofficeoffice manages the Arctic Research Initiative and other funds allocated to it supportingupporting both internal NOAA and extramural research. The undertakes coordination and outreach activities to support scientific research. It represents represents NOAA on the Interagency Arrepresents NOAA on the Interager U.S.U.S. involvementU.S. involvement in the international ArcticU.S. involvement in the i andand provides a point of contact between NOAA and the Cooperative Institute for ArcticArctic Research and the International University of Alaska Fairbanks.

## **Recent Accomplishments:**

BroughtBrought together the Arctic countries to undertake the Arctic Climate ImpactImpact Assessment by organizing the formative scientific meeting. Payoffs: Scientifically sound Arctic CPayoffs: Scientifically sour assessmentsassessments of climate impacts will be presented to asse Council for policy action in 2001 and 2004 respectively.

LeadLead the U.S. agencies to develop an Lead the U.S. agencies to develop an intervironmental change in the Arctic. Payoff: theirtheir efforts to achieve a comprtheir efforts to achieve a comprehent change in the Arctic and of its consequenchange in the Arctic hemisphere.

Lead development of the Arctic Theme Page (www.arctic.noaa.gov/) to bring Arctic science to students and the general public. *Payoffs: Public awareness of the Arctic people, Arctic environment and wildlife, and role of the Arctic in our weather, climate, and quality of life.* 

## Scientists supported by the Arctic Research Office have:

ProvidedProvided key data demonstrating the importance ofProvided key data deforfor bringing persistent organic pollutants, mercury andfor bringing persistent or toto the Arctic. to the Arctic. Payoffs: More confident assessment of risks to and the environment from toxic chemicals.

DemonstratedDemonstrated linkDemonstrated linkages among climate variated ecosystemecosystem productivity and Native subsistence hunting.ecosystem prinformation to managers and policy makers.

Developed models and conducted diagnostic studies to determine how Arctic atmospheric processes control climate and weather at midlatitudes. *Payoffs: Improved weather and short-term climate forecasts by including Arctic processes in forecast models.* 

## What s Next for ARO?

Science challenges for the next decade:

The The Arctic, the Bering Sea, and the high The Arctic, the Bering Sea, and the high North Atlantic are remote a onon the people and economy of the Unitedon the people and economy of the United States. The U.S.on the priorities priorities for Arctic Science as: quantifying climate changes in the Arctic and priorities for Arctic Science a climaclimate; climate; approaching Bering Sea ecosystem predictability; and improving human and enviroclimate; inin the Arctic. The NOAA Arcticin the Arctic. The NOAA Arctic Research Office was established in 1999in the A inin these areas and to promote morein these areas and to promote more effective science planning in these are partners. partners. NOAA s response to these scientific prioritiespartners. NOAA s response to these scientific prioritiespartners. toto its people and economy, and to adaptto its people and economy, and to adapt successfully when environn workingworking with other Federal agencies, working with other Federal agencies, the State of Alaska, working v countries countries to create scicountries to create science programs with the complexity and questionsquestions about the Arctic region questions about the Arctic region such scientificscientific community and Arctic residentsscientific community and Arctic residents become more aware situationssituations while effective response is still possible. NOAA has asituations while effective response is still and and will undertake efforts and will undertake efforts to improve scientificand will undertake efforts to improve efforts efforts efforts efforts efforts efforts efforts ef buildbuild bridges between scientists, policy-makers, and build bridges between scientists, policy-makers, ar currently facing NOAA and the Nation are:

CanCan we determine what caused the large-scale changesCan we determine what caused the large-scale (net(net warming and increase in the strength of the circum-Arctic atmospheric (net warming and estimate the effects of these changes on weather and climate in the Northern Hemisphere?

CanCan we learn why there have been dramatic recentCan we learn why there have been dramatic recealmon)salmon) is almon) in the Berisalmon) in the Bering Sea, and can we create a reliable scientic changes and improving living resource management?

CanCan we quantify the real riCan we quantify the real riskCan we quantify the real risks to Arctic splevels of contaminants present in the Arctic?

## **Research Partnerships:**

TheThe Arctic ResearcThe Arctic Research Office wThe Arctic Research Office works closely with the C UniversityUniversity of Alaska to define and implement its researchUniversity of Alaska to define and implement organizations and academic institutions to conduct research on critical Arctic science topics.

## **Budget and Staff:**

The The Arctic Research Office has a base budget of \$1.6 million and a staff of 2 fThe Arctic Research Office provides support for university employees at the Cooperative Institute for Arctic Research.

## For more information, contact:

Dr. John Calder, Director NOAA Arctic Research Office 1315 East-West Highway, Room Silver Spring, MD 20910 (301) 713-2518 http://aro.oar.noaa.gov

